1. $\dfrac{2^{x-1}\cdot 4^{x+1}}{6^{1-x}}<3$ R: $\left[x<\dfrac{Log9}{Log48}\right]$

2. $\dfrac{3^x\cdot 5}{2^{x-1}}\le 10^x$ R: $\left[x\ge -\dfrac{1}{1+Log2-Log3}\right]$

3. $\dfrac{2^x\left(3\cdot 2^x-5\right)+2}{1-3^x}>0$ R: $\left[x<1-\log_2 3\vee x>0\right]$

4. $\dfrac{3^x\cdot 2^{1+x}}{3\cdot 2^{x-1}}>\sqrt{\dfrac{6^x}{3^{x-1}}}$ R: $\left[x>\dfrac{3-\log_3 16}{2-\log_3 2}\right]$

5. $\dfrac{2^x-4^x-1}{3^{-x}-25\cdot 3^x}<0$ R: $\left[x<-\dfrac{Log5}{Log3}\right]$

6. $\dfrac{9^x-1}{3^x-4}\le 0$ R: $\left[0\le x<\log_3 4\right]$

7. $\dfrac{3^{2x+1}+40}{3^x}<34$ R: $\left[\log_3 4-1<x<\log_3 10\right]$

8. $5\cdot 3^{1+x}+6^{1-x}>0$ R: $\left[\forall x\in R\right]$

9. $9^x-10\cdot 3^x+25\ge 0$ R: $\left[\forall x\in R\right]$

10. $3^{x+1}-2^{x-1}>3^x$ R: $\left[x>\dfrac{Log4}{Log2-Log3}\right]$

11. $2\cdot 9^x\ge 3^{x+2}-10$ R: $\left[x\le\log_3 2\vee x\ge\log_3 5-\log_3 2\right]$

12. $5^{\frac{x}{2}}-4^x>0$ R: $\left[x<0\right]$

13. $6^{x+1}+6^x+6^{x-1}<6$ R: $\left[x<2-\log_6 43\right]$

14. $2^{x+1}\ge 5^{1-x}$ R: $\left[x\ge Log\dfrac{5}{2}\right]$

15. $3^{x+2}<4^{2x+1}$ R: $\left[x>\dfrac{Log9-Log4}{Log16-Log3}\right]$

16. $7^{1+x}\ge 1+7^{x-1}$ R: $\left[x\ge\dfrac{Log7-Log48}{Log7}\right]$

17. $2\left(3^x-2\right)^2-3\left(3^x-2\right)+1<0$ R: $\left[\log_3 5-\log_3 2<x<1\right]$

18. $2^{2x-1}-5^x\ge 3\cdot 5^{x+1}$ R: $\left[x\le-\dfrac{Log32}{Log5-Log4}\right]$

19. $3^{x+1}+3^{x-1}>4^x+2^{2x-1}$ R: $\left[x<\dfrac{Log9-Log20}{Log3-Log4}\right]$

20. $2^{2x+1}\ge 5^{1-x}$ R: $\left[x\ge\dfrac{Log5-Log2}{Log5+Log4}\right]$

21. $2^{\sqrt{x^2-4}}\ge 0$ R: $\left[x\le -2\vee x\ge 2\right]$

22. $64-2\cdot 3x>45+3^{2-x}$ R: $\left[-\dfrac{Log2}{Log3}<x<2\right]$

23. $\dfrac{e^x-e^{-x}}{2}>1$ R: $\left[x>\ln\left(1+\sqrt{2}\right)\right]$

24. $\dfrac{e^x-e^{-x}}{e^x+e^{-x}}>\dfrac{1}{2}$ R: $\left[x>\dfrac{\ln 3}{2}\right]$

25. $81\cdot\log^4_{\frac{1}{8}}x+\log^2_{\frac{1}{2}}x-2\ge 0$ R: $\left[0<x\le\dfrac{1}{2}\vee x\ge 2\right]$

26. $\dfrac{2+\log_2 x}{2\log_2 x-1}-3+\dfrac{1+3\log_2 x}{2+\log_2 x}>0$ R: $\left[0<x<\frac{1}{4}\vee\sqrt{2}<x<8\vee x>8\right]$

27. $\log_2\left(4^{2x}-3\cdot 4^x+6\right)\le\log_2\left(4^x-2\right)+\log_2\left(4^x+1\right)$ R: $\left[x\ge 1\right]$

28. $\log_{\frac{27}{8}}\left(1-\dfrac{3}{x}\right)<-\dfrac{1}{3}$ R: $\left[3<x<9\right]$

29. $\log_{\frac{1}{2}}\left(7-2^x\right)-\log_{\frac{1}{2}}\left(5+4^x\right)+\log_{\frac{1}{2}}7\ge 0$ R: $\left[2\le x<\dfrac{Log7}{Log2}\right]$

30. $\log_{\frac{1}{2}}\left(x^2+2\right)+\log_2\left(x-2\right)\le -2\log_4\left(x+1\right)$ R: $\left[x>2\right]$

31. $\sqrt{\left(\log_2 x-3\right)\left(\log_2 x-1\right)}\ge\log_2 x+2$ R: $\left[0<x\le\dfrac{1}{\sqrt[8]{2}}\right]$

32. $\sqrt{\left(\log_3 x-2\right)\left(\log_3 x-1\right)}\ge\log_3 x+3$ R: $\left[0<x\le 3^{-\frac{7}{9}}\right]$

33. $\log_3\left(3\cdot 2^{2x}-2^x\right)-\log_3\left(2^x+1\right)\ge x\log_3 2$ R: $\left[x\ge 0\right]$

34. $\log_2\left(2\cdot 3^{2x}-3^x\right)-\log_2\left(3^x+1\right)\ge x\log_2 3$ R: $\left[x\ge\log_3 2\right]$

35. $\log_2\left(6^{2x}-3\cdot 6^x\right)\le\log_2\left(6^x+3\right)+\log_2\left(6^x-4\right)$ R: $\left[x\ge 1\right]$

36. $\dfrac{2}{\log^2_4\left(x+3\right)}\le 2-\dfrac{3}{\log_4\left(x+3\right)}$ R: $\left[-3<x\le-\dfrac{5}{2}\vee x\ge 13\right]$

37. $\sqrt{\log^2_2 x-4}\ge\log_2 x+1$ R: $\left[0<x\le\dfrac{1}{4}\right]$

38. $\log_2\log_{\frac{1}{2}}\left(\dfrac{x^2-1}{x}\right)\ge 0$ R: $\left[-1<x<0\vee 1<x<\dfrac{1+\sqrt{17}}{2}\right]$

39. $\sqrt{\log^2_3 x-9}\ge\log_3 x+1$ R: $\left[0<x\le\dfrac{1}{27}\right]$

40. $\dfrac{\log_2 x-1}{\log_2 x+1}-\dfrac{\log_2 x-2}{\log_2 x+2}-\dfrac{1}{3}\ge 0$ R: $\left[\dfrac{1}{4}<x<\dfrac{1}{2}\vee 2\le x\le 4\right]$

41. $\dfrac{2}{\log^2_5\left(x-4\right)}\le 2-\dfrac{3}{\log_5\left(x-4\right)}$ R: $\left[4<x\le 4+\dfrac{1}{\sqrt{5}}\vee x\ge 29\right]$

42. $\dfrac{\log_3 x+1}{\log_3 x-1}-\dfrac{\log_3 x+2}{\log_3 x-2}+3\le 0$ R: $\left[\sqrt[3]{9}\le x\le 3\vee 9<x\le 27\right]$

43. $\log_{2-x}\left(x-1\right)>1$ R: $\left[1<x<\dfrac{3}{2}\right]$

44. $\log_3\left(2-3^x\right)+x>0$ R: [Impossibile]

45. $\log_2 x+\log_x 2<2$ R: $\left[0<x<1\right]$

46. $\log_3\log_3\left(2x-5\right)<0$ R: $\left[3<x<4\right]$

47. $Log\left(x-\sqrt{1-x^2}\right)<0$ R: $\left[\dfrac{1}{\sqrt{2}}<x<1\right]$

48. $2\log_2 x^3-\log_4 x^2+1<0$ R: $\left[0<x<\dfrac{1}{\sqrt[5]{2}}\right]$

49. $\sqrt{\log_{\frac{1}{3}}\left(x^2-8\right)}>0$ R: $\left[-3<x<-2\sqrt{2}\vee 2\sqrt{2}<x<3\right]$

50. $Log\dfrac{x-5}{x+7}>0$ R: $\left[x<-7\right]$